UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF WISCONSIN

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GARY SUOJA, Individually and as Special Administrator of the estate of OSWALD Suoja, deceased,

Plaintiff,

-vs- Case No. 99-CV-475-BBC

OWENS-ILLINOIS, INC., Madison, Wisconsin
November 30, 2015

Defendant. 9:12 a.m.

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STENOGRAPHIC TRANSCRIPT OF FIRST DAY OF COURT TRIAL
MORNING SESSION
HELD BEFORE THE HONORABLE STEPHEN L. CROCKER,

APPEARANCES:

For the Plaintiff:
Cascino Vaughan Law Offices, Ltd.
BY: ROBERT MCCOY
DANIEL HAUSMAN
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For the Defendant:
Schiff Hardin
BY: BRIAN WATSON
EDWARD CASMERE
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Chicago, Illinois 60606

Also appearing: Michael Barron - paralegal

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Also appearing:
Gary Suoja - son
Kimberly Suoja - daughter

* * * * *

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E-X-H-I-B-I-T-S

PLAINTIFF'S EXHIBITS		IDENTIFIED	RECEIVED
Ex. 91	Kenoyer CV	43	---
92	Kenoyer general report	46	---
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DEFENDANT'S EXHIBITS			
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(Proceedings called to order.)

THE CLERK: Case Number 99-CV-475-SLC. *Deloris Agnes Suoja v. Owens-Illinois, Inc.* is called for a court trial. May we have the appearances, please.

MR. MCCOY: Robert McCoy and Daniel Hausman for

the plaintiffs. And with us is Gary Suoja and also his sister, Kimberly Suoja.

THE COURT: All right. Mr. Suoja, Ms. Suoja, good morning to you. Counsel, good morning to you.

MR. MCCOY: Good morning, Judge.

MR. CASMERE: Good morning, Your Honor. Edward Casmere on behalf of Owens-Illinois.

MR. WATSON: Good morning, Your Honor. Brian Watson on behalf of Owens-Illinois. With us as well is our paralegal Michael Barron.

THE COURT: All right. Good morning to all of you as well. All right. Please be seated. Counsel, we're here for a bench trial by agreement of the parties. You've also consented to my jurisdiction. Let's talk about how we're going to do this with the bench trial format here. We've already talked a little bit telephonically about what you would like to do, and my intent is to give both sides as much of what you both want as I can; in other words, I'm going to try to stay out of your way to make your record and to brief this case post-trial, which you asked for. There won't be a ruling from the bench on ultimate issues. We're going to reserve on all that to give you a chance to brief it post-trial.

For that reason, my intent during the trial is to

let virtually everything in at this time. There's no jury. Courts, judges compartmentalize, so if something comes in just because I want a complete record and you don't think it should have come in, you can argue that post-trial in your briefs. The Court will find facts. I'll probably find pretty extensive facts in this case and explain why I'm accepting certain things and not accepting certain other things just so it's clear.

Along the way, I do expect you to make your usual objections to testimony and so forth and I will rule on those as we go. Sometimes if it's a close call, again, for the purpose of completing the record, I may allow it in subject to review post-trial. So I don't want to make it seem like this is ambiguous or wishy-washy, but it isn't going to be over until we get the post-trial briefs. Okay?

The Court's intent is to let both sides put in everything they want to put in within the limits of fairness and equity during the trial. Okay? So I just wanted to assure you all of that before we even started.

At some point we need to talk about how quickly you want to get the briefing in. I don't think we need to worry about that today. I think what I'd like to do is start with the witnesses sooner rather than later. But I'm not going to jam you guys up. If you need 30 days

post-trial for the first plaintiff's brief, 30 days for the defendant's brief, whatever. Okay? We've got holidays. You've got other cases. I don't want this to linger, but I'm not going to jam you guys up. Okay?

One thing I want to mention before I forget it is deposition transcript excerpts that you're offering into evidence. Of course that's allowed. I think Mr. McCoy floated the notion of actually reading them to the Court during the trial and I put the kibosh on that. Don't need it. Don't want it. It's a waste of time. I want the live witnesses to be able to testify.

However, post-trial when you refer to that, I don't just want the references you gave the Court in your submissions. I don't just want line and page references because neither I nor my staff have the time or the inclination to go look those up. I want you to build into your request for briefing time the need for your paralegals, your associates, whatever, actually to cut and paste the actual deposition testimony into a document so that it's there for the Court. I'm not going to micromanage the formatting, but I don't want to have to go looking for it and neither do my law clerks. Okay? I want you guys to put that all in a format that's it easy for the Court to find, digest and consider.

All right. I think that's it for me preliminarily. Oh, timing. It's 9:15 now. I don't know in you're planning on giving openings. I read all your submissions. I read that 11:59 submission last night, basically on the *Fuchsgruber* rule and strict products liability. We don't really need to worry about that right now.

I don't really need long opening statements. Frankly I don't need them at all. But I think you guys would be more comfortable if you gave them, so I'm allowing them. I don't know that we're going to need a morning break. I was planning to go until about noon, then we'll take an hour for lunch, not because I need it, but sometimes that helps with witness prep and so forth. We'll go 1 to 4:30. Probably take a break in the middle there whenever it's good. We're stopping at 4:30 or so because I have other cases and a lot of daily stuff that I have to do. I'm the traffic cop for this court, so I can't let things sit too long.

Tomorrow we could start as early as 8:30 if you wanted to. We'll stop at between 4:30 and 5 every day, probably closer to 4:30. If you're good with going shorter for lunch, that's fine, but I'd like to give you guys as much trial time interrupted as possible to get your witnesses in. Okay? So that's what I wanted to

start with.

Mr. McCoy, let's just talk mechanics and procedures. Any questions about that or any other suggestions or requests regarding how we're going to do this bench trial?

MR. MCCOY: No. I don't -- I don't have anything other than basically what Your Honor laid out. That's pretty much how I understood it --

THE COURT: Okay.

MR. MCCOY: -- and expected. I would just say this: We have -- we do have opening and it's 20 minutes is what Your Honor I think had said --

THE COURT: I said no more than 20 minutes.

MR. MCCOY: Right. Right. So that's fine and that's what we expected here and I think that is important. The first witness for us is going to be Stephen -- a live witness -- will be Stephen Kenoyer who is here. He's industrial hygiene. And then our medical expert has testified by trial deposition, which we'll be submitting that.

THE COURT: Okay.

MR. MCCOY: And then the next two witnesses we have live and there's other deposition witnesses, including one of the treating physicians testified by deposition also for trial. But the other two witnesses

we have live then will be -- first will be Kimberly and then will be Gary. So my expectation is that we'll basically fill up most of today is just my expectation.

THE COURT: Okay. That's fine. And when you say fill up most of today, do you have other witnesses you were planning on calling tomorrow or is that your case?

MR. MCCOY: That's our live witnesses.

THE COURT: Okay.

MR. MCCOY: Some of that just depends how quickly some of these exhibits go because we have a fair number of photos and things like that and some articles. But with normal expectations, we probably might finish all of our witnesses today. If not, we'll finish up tomorrow fairly quickly I think.

THE COURT: Sure. Okay. Thank you. That's helpful. Mr. Casmere, I presume you've got the point position for trial. Your input, please.

MR. CASMERE: Yes, Your Honor. As I understood it from Mr. Casmere, we're going to do three of their witnesses and then I have two witnesses that I would intend to start with tomorrow.

THE COURT: Okay.

MR. CASMERE: And the one thing that -- before we leave, and as Your Honor will see in my

no-more-than-20-minute opening statement, is there are sort of three aspects of this case from our point of view, and it's important for us to, before we leave here, understand when the window is closed in terms of their product identification witnesses and that aspect of the case that when we do our briefing we know what we're shooting at. And that's just putting down a marker that I want to make sure we clarify that at some point because there is some version of sort of a pseudodirected verdict-type angle to this case for us on some of these issues.

THE COURT: Sure. And I know you've got two more points to make, but let me drop my footnote in response to that. This is the loosest bench trial I've ever done, but it nonetheless is a bench trial. When we leave court, when the parties have rested, the evidence is closed. Okay? So there won't be any oh, by the way, from either side after the fact. I can assure you all of that. That's why it's important before you rest to make sure that during the trial somebody has said "and these are the deposition excerpts that we want into the record for the bench trial."

But other than that, you're right. And you talked about a psuedodirected verdict. Again, I understand that at the close of the plaintiff's case you're going

to the motion. I'll tell you right now regardless whether you deserve to have it granted, I doubt that I'll grant it because under the rubric and philosophy of this trial, I want your witnesses to testify just in case we need them. But I interrupted you. Next point.

MR. CASMERE: I'll save the other two points for my less-than-20-minute opening. The only other thing is a bench copy of our exhibit list and the exhibits on a thumb drive if the Court wants them.

THE COURT: As you wish.

MR. CASMERE: Not that you need more to read right now, Your Honor.

THE COURT: Thank you. Well, I actually pay attention when the witnesses testify. I think that's my job is to make credibility determinations, to the extent that I have to. So I don't do extra reading. I don't check my email. I'll actually be listening.

Toward that end, I'd like to keep this informal and helpful to both sides. In this court I was -- I started as a trial attorney in the Dirksen Building. If you're talking, you're standing. That's not the rule here. If you want to stand when you're talking, you can. You don't have to. If you need timeouts to talk amongst yourselves, that's okay. But the point is I want to keep it moving. I want to give the live witnesses their

opportunity to present their testimony. And that's true for both sides. Okay?

MR. CASMERE: Thank you.

THE COURT: Rule 615. Does anybody want to exclude or is this an open book?

MR. CASMERE: We'd like to exclude at least the expert witness.

THE COURT: Okay. Mr. McCoy, any objection to that?

MR. MCCOY: No.

THE COURT: Okay. Is he going to be the first witness anyway? I guess he can sit out until after the openings. But with that then, if there are no other preliminary matters, we'll ask the expert to step out, please. Mr. McCoy, are you ready to open?

MR. MCCOY: Yes, we're set to go.

THE COURT: All right. Let's begin, please.

MR. MCCOY: Presumably this will be coming up on the screen.

THE COURT: Yeah, I've got it. Do you want to turn the witness screen toward you so you can see it?

MR. MCCOY: That might help.

THE COURT: And if you want the podium, it's there in the corner.

MR. MCCOY: I don't need the podium. I just

talk faster when I'm up, so it will probably make it go a little quicker.

THE COURT: Okay. As long as the court reporter can hear you, you can wander and wave your arms. But only if the court reporter can hear you.

MR. MCCOY: All right. Then I'll --

THE COURT: It's probably easier if you sit down or -- I mean we can plug in the podium if you wish. But I can see you perfectly fine from your chair. I know you like to walk around.

MR. MCCOY: Standing up I get --

THE COURT: Yeah, just be near enough the mic that we get a recording, please.

MR. MCCOY: Is that okay now? Judge, this is the case that was filed back in 1999, I believe, that got caught up in the MDL and finally got remanded, I think, in 2013. So it's been sitting around a long time. There's nothing that the Suojas could do about that. Mrs. Suoja was the original plaintiff and she died. So here we are about 20 years almost, 19 years after he died.

The evidence isn't perfect because some of it has been lost along the way. The MDL didn't allow discovery until very late, opened up in 2012, and a lot of things disappeared here that might be helpful to this case.

But we got what we got. We got two -- and I'll go through this now.

So first, Judge, I want to start with our first slide here and that is that what's important in this case, because this is a strict products liability case about unreasonably dangerous products, is the normal incidence of mesothelioma is one in a million.

THE COURT: Actually that's a billion.

MR. MCCOY: That's a mistake. Right. So that's the advantage of a bench trial, I guess.

THE COURT: Okay. So the exhibit should drop three zeros?

MR. MCCOY: Yeah. Right. It's one in a million. That's normal. Insulators, now Mr. Suoja was an insulator. He was an insulator for all his career. Insulators though it's one in ten. They were called asbestos workers originally was the name of their union. Fifty percent of these insulators in the studies have died from asbestos-related diseases. It's a dangerous product.

There's 10,000 mesothelioma cases a year. Go to the next slide. And that was reported years ago. Now, there's been more data. 20,000 lung cancers from asbestos.

The next picture is a picture of the family, and on

the far right is Ozzie Suoja. Even when he passed away, he had kept himself in good shape. His death cause was -- we've got another misspelling there, might be because the medical record spelled it's wrong, but it's epithelia mesothelioma, and it's of the abdomen area. And the other, that's the pathology report there, the treating physicians.

The next slide is his death certificate which shows two things as the cause of death. One is a misspelled mesothelioma and the second cause of death is asbestos exposure. Death certificates are presumptively correct in Wisconsin. There shouldn't be any contest about that in terms of the findings in this case. The defense doesn't have even a medical expert, although I know they cross-examined our expert.

1943, Judge. That's the key date here. In 1943 two things happened: One is that Owens-Illinois got a letter saying, when they're starting to think about marketing the product that became Kaylo which was a pipe-covering material that was typically in three-foot lengths and in this case we're dealing mostly with the form that was slightly molded to fit halfway around a pipe, that that product which had anywhere from about 13 to 20 something percent asbestos in it was, in the words of the letter that they got from the very well-known

nationally known laboratory they hired, was a first class hazard. That's a letter in 1943 to the industrial hygienist and the medical director of industrial -- of Owens-Illinois, which at that time was a large glass company that needed to do other kinds of business. So that's '43.

One thing -- the second thing in '43 is that's when Ozzie Suoja began work as an asbestos worker insulator. And he continued that until 1985 when he retired, early '85.

The next picture is what we're looking at, that's the pipe insulation, and that's the molded piece that you can see that fits usually in halves around the pipes. That's Owens-Illinois's Kaylo.

The strict product liability claim is about several things: 1, that Owens-Illinois did not warn; 2, no precautionary instructions; 3, there was no -- there was an inadequate investigation regarding hazards of the health of this Kaylo product, and that substitutes were available. Those were all separately pled bases for strict products liability.

Strict products liability is joint and several liability in Wisconsin at the time that he was diagnosed in '96 and it's a constitutionally protected right. That's something obviously we'll put in the post-trial

briefing.

The negligence claim is also in the case right now. That is similar evidence. I would mention here, Judge, the choice of Owens-Illinois would be, if there was a verdict -- I should say a finding against Owens-Illinois in this case -- they have a right of contribution. I think it's a one-year statute of limitations from the time that they've been adjudicated responsible that they can go out and collect their money from all the other claimed tortfeasors. So that's their statutory right if there's an award against them to contribution.

THE COURT: You mentioned it, but let me just ask for informational purposes. I will not ask rhetorical questions during this trial. But are there Pierringer releases out there? I mean what about the other parties that have been sued or settled?

MR. MCCOY: Right. There are and those have been disclosed and there are some offsets. Right.

THE COURT: Okay. Just asking. I'm sure those will be made clear to the Court.

MR. MCCOY: Right. There are offsets, yes. And that's how they'd be treated in joint and several liability.

The next picture is a picture of the wedding, a picture as they got a little bit older in years. I

think the one up in the right, you'll see this was the 25th vows and then I think the next one might be the 50th they renewed their vows. Very close family relationship. You'll be hearing about that.

So the next thing I want to go to is this timeline which we put together about the Kaylo exposures in this case in the 50's and the 60's. The early 1980's is when Ozzie Suoja began testifying in other people's mesothelioma cases. That's when he first had definitely significant fear and apprehension and anguish of what might happen to him because that's what was happening to his co-workers. There will be testimony about that.

In 1991, family members were diagnosed with asbestos disease, adding to his own apprehension and fear based on the fact that he was the one who brought this home.

1993, maybe a little bit before, early systems including abdominal pain. And this again was a mesothelioma of the abdomen. He had also had diarrhea which became uncontrollable.

In 1996, the pain continues. He goes to the hospital for surgery. They found a mass in there at the time. They diagnosed his mesothelioma. The treaters, they closed him up because they couldn't do anything. All they could do is palliative care. And then they had

additional complications like a tube inserted all the way through his nose that was permanent in there to correct some of the bowel problems. He had total bowel obstruction. They put him on morphine, and then even with the morphine, the records show he's in pain all over at the end.

And finally, on December 29, 1996, he passed away. Fortunately his period of time didn't create a lot of medical bills that Owens-Illinois is responsible for because he's not the kind of guy who complained and went to doctors. When he had something wrong with him, he was very stoic and kept it inside of himself.

But by the time they saw this mesothelioma, all the organs in his abdomen were covered and that includes intestines, kidney, spleen, stomach, on and on and on completely from the pelvis all the way up to the top of the rib cage there. That's mesothelioma. It spreads like wildfire.

So continuing on -- and another thing I should mention, Judge, is he did have diabetes, which was very controlled and it's not listed as a cause of death and the doctors don't give any opinion saying that that was a cause of death or that it shortened his life. So although it did lead to his blindness basically in this case, you can't say that a blind person's life and the

activities that a blind person can do somehow are worth less than those of a person who isn't blind because he stayed very active even with his blindness. He had diabetes, I think, in his 40's. So he controlled it. Took care of himself. You saw his weight. He was very careful with that. There will be some more testimony on this.

Important other dates -- I want to move this along quickly because I know we're getting near my 20 minutes. '43 we already talked about. OI began Kaylo product. That's on the left. They conducted the Saranac test; got a letter saying it was a first class hazard. '43 through '85 Ozzie is the insulator.

1958 is one of his co-workers, Mr. Zimmer at the Badger Ordnance, which is the job site where we've got the exposures to the Kaylo, worked with him at Badger, will talk about the Kaylo. April 30 of '58, Owens-Illinois sells the Kaylo business to a company Owens-Corning, which it had a 20 percent business interest at the time. But that's the date for the manufacturing to stop.

'68 to '69 is another exposure period, give or take a year or so depending on a couple witnesses on that. But basically co-worker Schlub worked with him for five to six months at Badger and throughout this time period,

Of course this is what insulators do. They put on insulation or they take it off. That's basically all they do. It's not like a lot of other trades that do a lot of different things. But they're removing a lot of Kaylo that was put on earlier.

Schlub testifies that in the early 80's, this is when he began testifying, learning about, and fearing himself. '91 he learned about it for his family -- oops. Okay. And in '96 is when he passed away.

And finally, I would point out that the life expectancy of Ozzie Suoja is 11.6 years at the time of his death. That's how much life -- when he died, he knew he had lost the rest of his life and the activities that he was very involved with.

Next. This is a quotation from the co-workers, Mr. Schlub and Mr. Zimmer. These are the two guys who testified. We got their depositions in 2012. They were the ones left. The rest of the union was gone. And so this is what we'll submit. I'm just giving you a couple highlights of what we're going to be submitting. The materials, according to Schlub, the insulating materials were deteriorated. We had to remove them and replace them with new insulation. Very typical insulator work. The materials he removed with Mr. Suoja were the same Kaylo he had installed from '55 to '58. In other words,

during the period when OI was a seller, he was also working at Badger and putting in Kaylo and now he's removing it with Ozzie ten years later.

The removal of the pipe insulation created dust. We worked in it. We breathed it, get it on our clothing, get it on our hands. Again, classic insulator stuff. This case is about insulators who had the worst exposures of anybody. It's not a case where we've got small exposures to people here.

Next slide here -- that's the one I just read. Okay. So here we are. My life in the trade I had been using the materials. I knew what it looked like, what it felt like, what it smelled like. I could tell it was a Kaylo asbestos material. Even though the materials, when you take them out of the box don't have a name on them, if you work with them for decades you learn to recognize them. Mr. Schlub said that. He said it several times in his deposition. I could tell Kaylo was different from other insulations. He knew what they were removing ten years later, and it's also the same stuff that he saw put on.

Co-worker Zimmer. A few feet from Kaylo being removed at Badger -- Zimmer was a few feet away in '58, which is during the period when OI was still having their product that they had sold out there for inventory

purposes. But he knew Zimmer did both; that they were taking off what had been put on earlier and also installing new stuff in '58. So if it was put on earlier, it was definitely in the OI period.

The next quote did you ever work at a place with Badger? Yes. Were you there? That was probably '58. Late '58? Yeah. Was there any removal going on? There was. Could you tell what brand, what brand insulation was being removed? And the answer -- the answer we got it cut off, but the answer was he knew it was Kaylo. So both in '58 they were -- Ozzie was working with him removing Kaylo, installing new Kaylo, and then again ten years later they're taking off the old Kaylo with Schlub.

I would point out a couple things here, Judge, to make this case a little tough. One is OI sales records are lost. I'd also point out two things about Ozzie Suoja. When you get to the question of what -- whether he might have been at all at fault for this because he wasn't wearing, as was all the insulators in this period of time not wearing masks even in '67/'68, but keeping in mind he's a nonsmoker and a nondrinker. He is a person who takes care of himself. Again, the jury instruction is a presumption that a deceased person is not negligent. We would ask you to apply that. But

more than that, the evidence certainly supports he was a person who took care of himself. He didn't intentionally expose himself to what he knew at the time would cause mesothelioma. Even though there was some evidence that insulators were getting information, it was basically if you smoked, don't breathe asbestos. That was the understanding that was out there in the trade. So he's a nonsmoker.

Causation. It's significant exposure. This is the highest exposure trait. That's what Mr. Kenoyer will talk about this morning. One month insulator work, pipe covering is enough to cause mesothelioma by itself. Now, we've got about -- at least six, seven months, maybe more of Owens-Illinois alone. One month alone would cause it.

It's also important to remember this is a single or unified disease process from the lifetime of cumulative exposures. This is not something where you've got two separate car crashes within the same accident where you can assess different liability. Here we have one and only one disease process that falls certainly within the parameters of what would be joint and several liability at the time.

Dangers of asbestos. '48 report of Owens-Illinois from their laboratory said it was killing the animals in

the studies that they had done. '52 report said it was killing the animals. They got these reports straight from the Saranac Laboratories that they hired. Well, basically they didn't do anything to change Kaylo, they just kept selling it because they had started selling it in '43 all the way through '58. And then they sell it to a company to have an ownership interest in. So there wasn't any change in their behavior because of this and the product was dangerous.

Industrial Hygiene Foundation is an organization that provided industry members, including Owens-Illinois, all the information about health hazards. They got blurbs about asbestos. Again, their industrial hygienist and medical doctor didn't do anything to change it. They're an NSC member. That's another very reputable organization on safety and hazard procedures. Again, they got that information. Didn't do anything because of it.

The defense that you're going to hear about is that there was something called five million particles per cubic foot that if you didn't exceed it, it was okay. Well, first off that standard wasn't intended to protect against cancer, which takes a lot less asbestos than other forms of disease that had been studied for the five million particles per cubic foot.

The second thing was that Kaylo exceeded those exposures and that Owens-Illinois never went out in the field to measure what was actually going on. They never actually studied field conditions, they just got the laboratory report that the animals were dying and did nothing.

The punitive damages phase of this case, if it were necessary, is still in the MDL. It hasn't been remanded yet. The dangers of asbestos, again, no action was taken. No warnings. No safety instructions. No further testing in the field or to see what was happening to the insulators, even though they're selling the product that they were told to be dangerous and killed animals.

The next thing here was what did they do? They advertised the product as nontoxic. They called it that in the advertising materials.

THE COURT: Are you close to wrapping up?

MR. MCCOY: Yep. This is the last one. So these -- actually I've got two. So here is pictures of what asbestos looks like. It starts as a rock, but it's got these fibers in it. There are some of the fibers in the far right corner that have actually been released. That's what happens when you break it up, cut it, saw it like the insulators do, hammer it off when they remove

it.

And finally, this unreasonably dangerous product, you can't smell it, you can't taste it, you can't feel it, you can't see these fibers. We're talking about the fibers now. You can't -- you don't feel anything, and yet Owens-Illinois had that information about what happened after time of those exposures. It's fatal at low doses. It's fatal to half of the insulator trade. It's fatal to 100,000 persons per year. And there's no cure. That product is unreasonably dangerous. That's it, Judge.

THE COURT: All right. Thank you, Mr. McCoy. All right. On behalf of the defendant. If you need to set up, that doesn't count against your 20 minutes.

MR. CASMERE: Thank you. Can Your Honor see?

THE COURT: I've got a screen in front of me.

MR. CASMERE: Thank you, Your Honor. So the facts are sticky stubborn things. No matter how hard someone may try to change, manipulate or alter the facts, in the end facts are facts. And sometimes the facts get in the way of a good story. When you follow the facts and you follow the evidence, sometimes you find that the facts don't support the claim that somebody wants to make. And this is one of those times.

There was something not right about the testimony

in this case. So we checked the facts. The miles upon miles of white steam insulation at Badger Ordnance Works that had to be replaced because it was water damaged or deteriorated was not Owens-Illinois Kaylo. It was something else. It was an 85 percent magnesia product made by Johns Manville. The testimony in this case about the description of the materials they were taking off doesn't fit Kaylo. The facts don't fit.

Mr. Suoja was a union asbestos worker for over 40 years. But the claim against Owens-Illinois is limited to a single job site for a few months in 1968. Through that entire career, that job site was over 7,500 acres, it had over 1,500 different buildings, and it had at the most conservative estimate over 200 miles of insulated steam pipe.

The claim is that Mr. Suoja was removing white insulation from those steam pipes because it was deteriorated and he did that while working for a company called L&S Insulation. The Social Security records show when Mr. Suoja worked for L&S Insulation. He didn't begin to work for L&S Insulation until the third quarter of 1968 and he worked there until the 80's.

We also know from the L&S ledger books when it was exactly that they were there and had people there doing insulation. And they first showed up to do insulation

work in September of 1959. Those other entries are for aluminum jacketing and asbestos corrugated board work, having nothing to do with the claim against Owens-Illinois. So the first time L&S is there is September of 1959 and they're there in the 60's, in the late 60's, and Mr. Suoja doesn't show up working at L&S until 1968.

The claim against Owens-Illinois is based on the lack of a warning on a box that he never saw, on a product he never used, and exposure that he never had. It's based on a claim of exposure to Owens-Illinois Kaylo more than ten years after Owens-Illinois got out of the business. Owens-Illinois got out of the asbestos insulation business April 30th of 1958.

The claim of this rip-out exposure is based entirely on speculation, unreliable and uncredible testimony. Even if you take that testimony at face value, it's inconsistent with itself and it's demonstrably not Owens-Illinois Kaylo, the material that they describe. And it also contradicts the objective, documentary and testimonial evidence from other witnesses.

Now, there's three reasons why this claim fails, Your Honor. Mr. Suoja was not exposed to Owens-Illinois Kaylo. There was no defect in Owens-Illinois Kaylo.

There's no breach of any duty based on the knowledge at the time, the state of the art at the time when Owens-Illinois sold it. And third, neither OI's conduct nor its product caused Mr. Suoja's injury. They were not a substantial contributing factor to his illness. No exposure. No defect. No causation. It's a three-legged stool, this liability claim against Owens-Illinois. If any one of those legs fall out, they don't have a viable cause of action -- they don't have a viable claim.

I want to focus for a couple minutes on the no exposure claim. They can't meet their burden based on speculation and testimony that's not credible. But rather than just point out the flaws in that testimony of why it's not credible, we went and checked the facts.

We went to Badger Ordnance. We looked. And Badger Ordnance, as I said, had over 200 miles of elevated steam pipes. It was built between 1942 and 1944. That's before the commercial manufacturing and sale of Kaylo. Owens-Illinois sold Kaylo commercially from about 1948 to April of 1958 when that business was sold to a separate company, Owens-Corning FIBERGLAS, for whom Owens-Illinois has no liability.

The insulation contract for the initial construction of Badger was contract number 168 and it

was for over $700,000 in 1940 dollars. That contract went to a company called AM&M, Asbestos Magnesia & Materials out of Chicago. AM&M was a Johns Manville distributor. The records show that when it was 30 percent complete, phase one was 30 percent complete, they had already done 45,000 linear feet which makes it about 150,000 linear feet or 28-and-a-half miles just for phase one of the initial insulation of Johns Manville product in the 1940s.

There was a phase two contract, contract number 661, in 1944. That also went to AM&M Insulation, the Johns Manville distributor.

We also found evidence of photographs of the storeroom of Badger Ordnance Works in the 1940's and what it shows is Johns Manville 85 percent magnesia insulation.

We also found photographs from the history museum at Badger Ordnance of insulators installing on outdoor steamlines Johns Manville 85 percent magnesia insulation. The white steam pipe insulation is Johns Manville 85 percent magnesia. And the important thing about 85 mag, Your Honor, is that it's water soluble. It can be mixed with water. If water gets on it, it deteriorates. It will slump. It will sag. It will be ruined by water.

Now, the plaintiffs have disclosed three witnesses -- oh, by the way, Your Honor, the boxes out in the field and the boxes in the storeroom, Johns Manville 85 percent magnesia.

Now, the plaintiffs have disclosed three witnesses to prove their exposure claim against Owens-Illinois. The first is Mr. Schlub. He starts in the union in 1955, but he says he worked with Mr. Suoja at Badger for L&S in 1967. Now, he's wrong by about a year because Mr. Suoja doesn't show up at L&S until '68. But it's close enough. He says they were working on outside steamlines.

Now, Mr. Schlub says that he knows they were ripping out Kaylo in the late 1960's because it was deteriorated from weather and it was rained on, it was white, and he knows that 85 percent magnesia products are white. He believes that Kaylo is an 85 percent magnesia product and that it's not a calcium silicate product. He also believes that it was what was originally installed in the 1940's because he was told by people that what they were ripping out was what was originally installed in the 1940's. That's not Kaylo.

Now, Mr. Schlub was also there, he says in late 1959, not 1958, but late 1959 for a different company. He says he can recognize Kaylo because it was again an

85 percent magnesia product that was white. Now, he does not say he worked with Mr. Suoja in 1959. But even if he did, it's not Owens-Illinois Kaylo. And what he's describing as a white insulation that deteriorates is an 85 percent magnesia. And he believes that Kaylo is an 85 percent magnesia. That's in his testimony. That's Mr. Schlub. He's their best witness. He's the only witness that matters in this case.

Mr. Haase is the second individual. He started in the union in 1963. And Mr. Haase is important for two things: He says that he saw Mr. Suoja working for L&S at Badger in 1969. That's about right. That matches the Social Security records and that matches the other records. And he also says that it was common knowledge during that time frame among the insulators union, the union that Mr. Suoja and Mr. Haase remembers, that working with asbestos products could be hazardous to their health.

The third witness that they offer -- and by the way, Mr. Haase doesn't say anything about Kaylo at all, so he's no help there. The third witness they offer is this Mr. Zimmer. Now, Mr. Zimmer actually doesn't matter at all because Mr. Zimmer starts in the trade in 1957 and what he testified was that he showed up at Badger in late 1958 for L&S. Well, we know that that

actually can't be true, it's late '59. But either way, if it's late '58 or late '59, it's not Owens-Illinois's product.

We also know that Mr. Suoja didn't work for L&S in '58 or '59. It was a decade later in '68. Now, Mr. Zimmer says he didn't do the work, he was just an apprentice. But he saw other people, not Mr. Suoja. He just says he didn't see Mr. Suoja do anything. All he says is I think I saw Mr. Suoja there. There's no connection between any exposure to any product. But we know Mr. Suoja is not there.

But Mr. Zimmer says he knows that they were removing old Kaylo because it was white and you could tell that that was Kaylo and that it was the stuff that they originally put on. Now, Mr. Zimmer's testimony is also inconsistent with what he said in his own lawsuit as a client for Mr. McCoy's firm, as is Mr. Schlub. Mr. Zimmer said that what he was using at Badger Ordnance was a product called Armabestos, A.P. Green, and M Block.

Those are the three witnesses that they have. Zimmer doesn't put Mr. Suoja anywhere near Kaylo and he puts him off by a decade. That's provable by the documents. Mr. Haase doesn't put Mr. Suoja with any Kaylo at all, but he just confirms he was at Badger for

L&S in '69. And then you have Mr. Schlub, who says I was with him in the late 60's and it was an 85 percent magnesia product.

There are two other witness that we're going to offer testimony: A Mr. Locher who simply says that during that time frame, there were numerous different asbestos-containing insulations that were white. They were called white line products and that included thermasbestos, Johns Manville 85 percent magnesia, PABCO, Kaylo, calcilite and Carey. White doesn't mean Kaylo.

You also -- we'll also offer the testimony of Mr. Borchardt who says that the term Kaylo, when used at L&S, whether it -- it was used as a generic term for calcium silicate insulation. Kind of like Kleenex for facial tissue. And he says when they say Kaylo, it could be Johns Manville, it could be Baldwin-Ehret-Hill, it could be PABCO, it could be Atlas, or it could be Owens-Corning FIBERGLAS Kaylo.

The other important thing that Mr. Borchardt says is that where Mr. Suoja worked from 1954 to 1968 was a company called McDermott in Rockford. And Mr. Borchardt says McDermott had the jurisdiction in Illinois. They didn't come up to Wisconsin to do work. So we have Mr. Suoja '68 to '83 at Badger for L&S.

Now, that's the credible evidence. '68 to '70 timeframe, Mr. Suoja is at Badger. He's working on outdoor steamlines with white insulation that had been deteriorated. Kaylo was hydrophobic. It was not soluble in water. It was insoluble in water. The advertisements show that. The advertisement that Mr. McCoy showed you in his opening says it's insoluble in water. You could boil it. You could be in a flood for weeks. It was insoluble in water. The white stuff that was deteriorated was 85 percent magnesia. Kaylo was a calcium silicate. It does not deteriorate in water.

Now, the evidence in this case I think is going to be that there's over a million feet of insulated steam pipes at Badger. Any Kaylo that can be put there is a miniscule amount and the odds are over 99.5 percent that whatever was on those pipes wasn't Owens-Illinois Kaylo. But more importantly, the witnesses' description of what Kaylo is and what they saw, it cannot be Kaylo. If it's getting deteriorated from water, that's not Kaylo. If it's an 85 percent mag, it's not Kaylo. Any claim of Kaylo removal in the 60's is pure speculation and the facts don't fit. And the leaps of faith that need to be made and the assumptions that need to be made just to get the possibility of exposure are too great.

I want to talk very briefly about the other two legs of the stool, Your Honor. No defect. No breach. The state of the art at the time. The information out there at the time going back to 1930 was that asbestos can cause a disease, asbestosis. The Insulators Workers Journal, the journal that went to the home of every insulator in the union that Mr. Suoja was a member in 1930 published that report. In 1938, the government said the same thing. In 1947, Wisconsin General Orders said that you had to keep it below the five million particle per foot level, and that here were the things you needed to do as an employer to protect employees to make sure you're not exceeding the safe level.

In 1951, the Walsh Healey Act did the same thing. And what's important about that is that Badger Ordnance is a government-owned facility and the Walsh Healey Act applied.

In 1951, Badger Ordnance had a safety handbook that said you needed to wear a mask or respirator under dusty operations.

In 1957, the Asbestos Workers Journal started talking again about the health hazards of asbestos.

In 1961, the Asbestos Workers Journal put out an advertisement with a photograph or a picture of the grim reaper and asked and told their members to wear your

respirator.

In the 1960's there are more studies published in the journal. And in 1964, there's a huge conference with this Dr. Selikoff who spoke to the insulators and told them they had to protect themselves and wear their masks or respirators. And that's all before Mr. Suoja shows up at Badger Ordnance.

Owens-Illinois did test its product. It tested it extensively. The letter that Mr. McCoy referred to was at the beginning stage where they didn't say it was a first class hazard, they said because you have silica and asbestos, you have all the ingredients of a first class hazard. So we better study it. So they did. They did animal studies for almost ten years. At the end of those studies, what they were looking for is to find out what the manufacturing process rendered the raw materials inert. And what they found at the end of those studies was that the silica changed, the diatomaceous earth changed, but the asbestos remained asbestos. And what the laboratory told Owens-Illinois was you've got to do the same things that's in Walsh Healey, that's in the General Orders. In your plants, you have to make sure you're not exceeding the TLV; you have to have your workers wear respirators where it is being exceeded. And the Saranac Laboratory published

those results to the entire world. They didn't find any cancer. They found nine guinea pigs that got some form of asbestosis, but the rats and the hamsters didn't. There was no asbestos-related disease in Owens-Illinois's plant. And what Owens-Illinois was told was do the same things that's in Walsh Healey.

And Your Honor, here is a picture of the November 1961 advertisement that was in or ad that was in the Asbestos Workers Journal.

Now lastly, causation. Mr. Suoja admitted over a 40-year career exposure to dozens upon dozens of different products. To pick out this Kaylo product that's not really Kaylo for a few months in the 1960's and say that's a substantial factor, that's not fair and that's not accurate. But even more importantly, the claim is that the lack of a warning on a box caused this. Mr. Suoja never saw the box. He was at the facility ten years later. As Mr. McCoy just said, you can't see anything on the pipe covering once it's on. There's no way to communicate any dangers. His clock stops April 30 of 1958 with respect to Owens-Illinois and its knowledge and what its obligations are. There's no way to communicate anything a decade later on something on a pipe. He never saw the box. Moreover, his employers knew, the facility owner knew, they all

knew exactly what to do and whether they did it or not was up to them. They're trying to make the facts fit a claim that just simply don't fit.

I want to -- there's no issue on substitutes in this case. They have no experts to talk about asbestos substitutes. There were no substitutes that worked at that time. But there's going to be no evidence, there's no expert testimony on substitutes.

It is several liability. There are Pierringer releases. They settled with a lots of different people. This is a several liability case. Owens-Illinois should be zero percent responsible. But if it's not, it's only responsible for what percentage it caused to the overall risk or the overall disease amongst all the other exposures. It's several liability.

The claims about family members and fear about cancer, those aren't compensable. You can't recover for those. Those aren't causes of action. The sales records from Owens-Illinois weren't lost. In 1953, Owens-Illinois entered into a distribution agreement with Owens-Corning FIBERGLAS. From '53 to '58, Owens-Corning FIBERGLAS sold the product and they had sales records. And Mr. McCoy has some of them, he just doesn't have a lot.

And in April of 1958, Owens-Corning bought the

business lock, stock and barrel and continued to make and sell Kaylo over the years. Owens-Illinois is not responsible for their Kaylo.

We did advertise the product as nontoxic because that's exactly how it was described in the industrial hygiene medical literature at the time because it wasn't a systemic poison and there will be evidence on that. And then finally, there's no punitive damages in this case.

In the end, this case is about an exposure that he never had, to a product that he never used, on a box he never saw. Thank you. (10:10 a.m.)

THE COURT: All right. Well, thank you. All right. Let's go straight into the first witness. Mr. McCoy.

MR. MCCOY: Yes. I'll get Mr. Kenoyer back in here. He's on his way. He's just using the restroom real quick.

MR. CASMERE: Your Honor, for the record Owens-Illinois's open statement will be Exhibit 1933.

THE COURT: Understood. Thank you.

MR. MCCOY: I can provide a copy of our opening statement to you, Judge.

THE COURT: It's not necessary and if anyone is going to be ordering the transcript to accompany your

post-trial briefs, it's all going to be in there anyway. I'm not saying you have to, but if the transcript is coming in, you can ask for the opening as well if you wish.

MR. MCCOY: I was just going to give you the PowerPoint that we used.

THE COURT: That's fine. Do you want to put a number on it? Mr. Kenoyer, please come forward and the court reporter will swear you.

STEPHEN KENOYER, PLAINTIFF'S WITNESS, SWORN,

MR. MCCOY: 136 is the PowerPoint.

THE COURT: I'll take the exhibit. Okay. Now, Mr. McCoy, you were starting to tell me about the computer?

MR. MCCOY: Yes. Mr. Kenoyer has copies of any articles and so on that he might reference on the computer. Is that -- I don't know what the procedures would be.

THE COURT: The pretrial conference order said you're supposed to check all this before you come in to make sure it's all working and I see him up here looking for an extension.

THE WITNESS: Well, am I going to be able to use it?

THE COURT: If you can get it set up in the

next 60 seconds you can. But this is something Mr. McCoy was supposed to take care of before we started this morning.

MR. MCCOY: Separately we have a PowerPoint he's done that we have on our computer.

THE COURT: Like I said, I'm not going to micromanage how or what you put in, but I want it to move smoothly. This was supposed to be taken care of before we begin, even in the absence of a jury.

MR. MCCOY: Understand.

DIRECT EXAMINATION

BY MR. MCCOY:

Q Ready?

A Yes, sir.

Q Okay. Mr. Kenoyer, can you introduce yourself and spell your last name for us. Give us your name, spell your last name.

A Yeah. My name is Stephen Kenoyer. It's K-e-n-o-y-e-r. I'm a senior industrial hygienist with Gobbell Hays partners. Our office is located in San Antonio, Texas.

Q Now, what is the -- how long have you worked for Gobbell Hays?

A Since 2001.

Q What type of business does Gobbell Hays do?

A It's an architect engineering firm. Essentially we deal with the built environment.
Q With what?
A Buildings.
Q Building environment?
A Yes.
Q And can you tell us what kind of educational background you had before Gobbell Hays?
A Well, I have a BS in physics and a master's in environmental science. As far as special training, I used to hold Texas licenses as an air monitor, project manager, and inspector. I also used to be licensed as a Texas lead inspector. And I'm currently licensed as a mold consultant in Texas.
Q And Exhibit No. 91, this is a copy of your current CV?
A Yes, sir.
Q Okay. So in terms of the training and experience that you've had in asbestos, can you describe what you've done?
A Initially starting with a former company called Astex, which is A-s-t-e-x. About 1990 we started off doing what are called phase one environmental assessments, which included the collection of random asbestos bulk samples. From that, progressed to doing

full what are called asbestos surveys into the project design for asbestos abatement and then I would manage various other project managers during the abatement process.

Q And when you say project design for abatement, can you give us a brief description of how that might work?

A Yes. It's basically -- it defines what the scope of work is, the square footage, where the work is to be done, the type of materials to be removed, respiratory protection the workers are supposed to use, the type of containment that is required.

Q Containment means, for example, what?

A Well, you have -- for friable material, a typical containment would consist of two layers of poly on the floor and on the walls, decontamination unit, HEPA fans for negative pressure, possibly a bag out. Other forms on piping. It could be using a glove bag methodology.

Q And how did you learn about project design for the abatement work?

A Initially it is actually taking the course works, the project -- it was not project design. I wasn't licensed for that. But project management. That's a 40-hour course. And so the consultant I worked with is the one who actually did the design.

Q And abatement refers to what type of work of

asbestos?

A The removal of the asbestos.

Q Now, have you studied the publications concerning the historical information about asbestos?

MR. CASMERE: Your Honor, can I have a 702 objection to the qualifications of this witness? May I inquire?

THE COURT: Because there's no jury, I'll let you save it for your cross. As was made clear at the beginning, even if you convince me he's not qualified to offer this testimony, I'm going to let him put it in and we can always strike it later.

MR. CASMERE: Thank you.

THE COURT: I do want to let you make your appropriate record at the appropriate time. Understood?

MR. CASMERE: Yes, sir.

THE COURT: Let's continue.

BY MR. MCCOY:

Q The question is have you studied the historical publications about asbestos?

A Yes.

Q And have you prepared a report that summarizes a lot of the historical publications?

A Are you referring to the general report?

Q Yes.

A Yes, sir.
Q And Exhibit No. 92 includes the -- is this a copy of that general report you referred to?
A Yes.
Q And what is the -- what does this general report cover as it would relate to your testimony here today?
A Well, in general you've got sections basically 1 through 7, and then section 8, which is the -- deals with thermal system insulation.
Q All right. So in the introduction you state "This report is based on a review of pertinent literature and exposure assessment studies cited in this report and our qualifications and experiences, environmental scientists and industrial hygienists." Did you write this with somebody else?
A That's correct.
Q So who else was a coauthor of this?
A Well, this specific document would be Ken Garza.
Q And it says at the beginning *General Asbestos Report of Kenneth Garza and Stephen Kenoyer*.
A That's correct.
Q So what did you contribute in terms of work on this report?
A Well, I mean this thing has been worked on, written, rewritten. Everybody's got their hands,

including Steve Hays has got some input on it.

Q Steve Hays meaning the president --

A That's correct.

Q -- of Gobbell Hays?

A That's correct.

Q Okay. So it's a collaborative effort of people at Gobbell Hays?

A That's correct.

Q And have you -- did you review these publications that are cited in here?

A Yes.

Q Let me pass this up to the Court for a moment. Exhibit 92. So your testimony here today, is it based on citations within this report?

A Yes.

Q And other knowledge -- I mean this isn't every article on asbestos that you've reviewed; right?

A No, it's not.

Q There's a lot of general information about asbestos in the field of industrial hygiene that you don't put in here; right?

A Yes. One part of it -- I mean there's thousands of reports out there, studies out there, so you're kind of limited to what you can actually do in a report which is manageable.

Q And there's a section in here -- after the introduction, you've got a section entitled *Industrial Hygiene*, and that's about the field of industrial hygiene --
A Correct.
Q -- is that right? Now, how long have you been involved with industrial hygiene work?
A Basically all my professional career is all industrial hygiene work. So from 1990 on.
Q So about 26 years?
A Yes, sir.
Q Now, you're not actually a certified industrial hygienist; right?
A That's correct. I'm not.
Q But you are -- for 26 years you've been practicing industrial hygiene.
A That's correct.
Q And then it continues on, a brief Section 3 on Regulations and Literature. This is all specific to asbestos; right?
A That's correct.
Q 4 is Air-borne Asbestos Hazard. 5 is Asbestos-containing Dust and Resuspension; right?
THE COURT: I think he's already referred us to Section 8 on page 15. Maybe we could go there.

MR. MCCOY: Right.
Q What I want to get at is all these sections up front. Bystander exposure plays a role in your testimony?
A That's correct.
Q Fiber type and size plays a role?
A That's correct.
Q And then we get specifically to asbestos. There's Section 8: Asbestos-containing Thermal Insulation, TSI; correct?
A That's right.
Q And that's what you focus on for the insulator trade?
A That's correct.
Q All right. So what other information have you learned that would inform you about what insulators do? And I'm referring back into the earlier time period to the 40's and 50's and 60's.
A For that time period primarily, again aside from looking at certain studies that discuss what the process was, what people were doing, it was also -- I was reading numerous, like hundreds of depositions of people working in that period.
Q And that's part of the litigation work you've done for a number of different cases; right?

A That's correct.
Q And some of those cases have also been for my firm; right?
A That's correct.
Q And cases have also -- you've also done case files for other lawyers; right?
A That's correct.
Q So when you were doing your actual field work on the abatement-type projects, did you actually observe the insulation materials in place?
A Yes. And just to be clear, on most of those instances we were the ones who actually went and did the initial sampling on them. So we identified what is or is not asbestos and then did the remediation.
Q When you do sampling, what do you have to do?
A We were physically taking a small knife, taking out what's a bulk sample, putting it in a bag, and sending it to a laboratory for analysis.
Q Did that include pipe-covering materials?
A Yes.
Q Now, just to be clear, you're not the author of any published peer-reviewed type articles; right?
A No.
Q And what's the compensation in terms of the rate that's charged to my firm for this case?

A $160 per hour.
Q That's for your time?
A Yes, sir.
Q Okay. And as part of your work in this case, you've also prepared a specific report to the case of Mr. Suoja; right?
A That's correct.
Q And that's also part of Exhibit No. 92?
A That's correct.
Q And this report contains a summary of materials that you reviewed; right?
A That's correct.
Q And also contains a statement of A through G opinions specific to Mr. Suoja's case; right?
A Correct.
Q Okay. What I'd first like to ask you is to describe how asbestos fibers behave when they're released into the air. And I'm talking in the context of insulator work on piping.
A Yeah. Well, essentially, I mean they're very small particles, and we have, again, the section in there probably describe it better than what I'm going to do just sitting here. But they're very light. They get carried easily by breezes and winds. They take a long time, depending on their size, to actually resettle

down. And once they do settle down, any kind of air disturbance then will resuspend them back in the air.

Q Now, you put together a PowerPoint presentation for today; right?

A Yes.

Q Okay. I'm going to go ahead and start that. The first slide is -- that you put is titled *Dangers of Insulation Dust*. And you've got --

THE COURT: Mr. Kenoyer, I think Mr. McCoy is showing it on the witness screen there, so you don't --

THE WITNESS: Oh, that's what I thought we would be able to see. Okay.

THE COURT: Right. So you're not going to need your laptop after all.

THE WITNESS: Okay.

MR. MCCOY: I'll move this over a little bit so you're not looking away from the judge all the time there.

THE COURT: I won't take it personally.

MR. MCCOY: Can't quite move it too far.

BY MR. MCCOY:

Q So the first article you've selected is what one?

A It's by Stephen Markowitz. 2015.

MR. CASMERE: Your Honor, I obviously have an objection to all this testimony, but especially if he's

going to give any testimony about medical issues. But again, under observing the process, I guess I'll hold off and wait.

THE COURT: Sure. Well, I'll tell you what. What I understand you to be doing is making a standing and universal objection to everything we're about to hear.

MR. CASMERE: Yes, sir.

THE COURT: Okay. Record made.

MR. CASMERE: Thank you.

BY MR. MCCOY:

Q This is a peer-reviewed publication; right?

A Yes.

Q Okay. Dr. Markowitz is a medical doctor; right?

A I believe so. I'm not sure. I don't have his credentials right in front of me.

MR. MCCOY: Your Honor, I can get the --

THE COURT: Well, if he doesn't know, you can't teach him on the stand. So let's just keep going.

MR. MCCOY: I have the publication.

THE COURT: It's his testimony, not yours.

MR. MCCOY: Okay. I understand.

BY MR. MCCOY:

Q Do you in your profession review publications by medical doctors?

A Yes.
Q Okay. You're not a medical doctor obviously.
A No.
Q Why would you, as an industrial hygienist, be studying publications that medical doctors wrote?
A Pretty much for the situation for asbestos is determining what type of exposures would increase risk.
Q All right. So you've given us on this slide quotations out of Mr. or Dr. Markowitz's publication here.
A That's correct.
Q Okay. And the first one you've selected -- I'll let you go ahead and read this one for us.
A Okay. It says "According to the most recent WHO estimates, more than 107,000 people die each year on a global basis from asbestos-related lung cancer, malignant mesothelioma and asbestosis resulting from exposure at work."
Q What's the --
THE COURT: Mr. McCoy, let me interrupt, and I want to be clear here. If you're giving the Court a primmer on asbestos and the dangers of asbestos, that's not really necessary. Let's face it, you and I went through the Bushmaker trial before. It's not this record, but we're really here to figure out was there

causation. Is there liability here. So if it's important to you, certainly you can put this all in, but I don't need Mr. Kenoyer to read me other people's quotes. I think what would be more helpful to the Court is to jump to his opinions as an industrial hygienist about what happened here and why it's relevant to finding liability against this defendant.

MR. MCCOY: I understand, Judge. I'm just -- if these become part of the record, then I won't have him read each one to you. I mean that's not necessary.

THE COURT: Well, let's be clear. I'm letting you offer them. I'm not keeping them out. But as I just promised Mr. Casmere, he's got a standing objection to be considering them at the close of the case. So yes, it is coming in today, and you don't need to have Mr. Kenoyer read them to the Court because I will read everything you all give me. Again, I understand the impulse when there's a jury, you have to educate the jury, and I don't -- I don't deny you that instinct. But here it's not necessary.

So if we're going to go to his opinions about what happened here and why it's a basis for liability, that would be most helpful to the Court.

MR. MCCOY: I understand. Okay.

BY MR. MCCOY:

Q So we'll move through the second quote here of Dr. Markowitz and we'll offer this through the PowerPoint and we won't read it to the Court.

Now, the next slide on the dangers of insulation dust, this is a publication made when, by who?

A This is David S. Beyer. This is actually -- the ream of documents we have in there are the National Safety Council.

Q What role did the National Safety Council play in terms of promulgating information that would be used back in the 1930's and 40's?

A They were an organization that put on a variety of symposiums where different members would come and discuss different issues in industrial hygiene.

Q And what did they do in terms of publishing information in addition to symposiums?

A Well, they would print -- put their symposiums and write them up as documents.

Q *National Safety News*. What's that?

A That's the one this one actually appeared in.

Q And is that a publication of the National Safety Council?

A Yes.

Q So the significance of this to you as an industrial hygienist practitioner, what does this 1933 signify?

A Well, basically here, and it kind of continues through this grouping of documents, is there's three, four major concepts. One is that dust is hazardous. You have dust that are visible, you can basically just see. But the smaller dust that you cannot necessarily see are just as hazardous or not more so. They also discuss dealing with ventilation and respirators.
Q Okay. This is still part of the Beyer publication?
A That's correct.
Q In terms of ventilation and respirators known during this period of time, what would be the types of things known back then compared to what we are using today?
A Well, I mean the process is basically the same, especially the ventilation. And as one of these discusses, you're basically -- you can isolate the work area, basic room. So where the dust is being created, isolate it from other workers and then you essentially are using what we call negative air machines where you're taking air from the dirty environment and extracting it outside.
Q So Dr. Sayers is the next publication you had. This is also the National Safety Council?
A Yes.
Q And this is what you're referring to where you talk

about engineering?
A Yeah. In this case, yes. He's specifically referring to that.
Q Engineering of what?
A Of the work environment. It's where the ventilation of what I'll call the negative air machines where you're removing the dust hazards.
Q And dust control measures would be what?
A The dust controls would be the negative air machines, but you can also set up containments to isolate where the work is being done from people are not doing that work.
Q What about in this time period in the 1930's, what types of dust control measures were being used?
A I don't think any was being used during that period of time. That's why these people are pointing this out. They're saying it needs to be done.
Q For asbestos.
A For asbestos, yes.
Q And what types were available and known for dust control back then?
A Essentially the same machines that we have now.
Q What other techniques besides machines?
A Well, one does talk about wetting materials down. That's basically it. I mean unless you were getting rid

of the product itself, that's how you have to deal with the dust.

And again, right here it's talking about the two types of respiratory protection, which is you're breathing outside air, the supplied air version or you're having filtered respirators.

Q How about when you talk about asbestos, what do you have to do?

A As far as what?

Q Respiratory protection. What works and what doesn't work?

A Well, you actually, you have to have an actual respirator as opposed to what they call a nuisance dust mask which doesn't provide any protection. But there's different levels of respirators from half face, full face. Now, like I say, you could do supplied air, which is air pumped in from outside.

Q When you talk about asbestos, what -- you said that certain types don't work. What would be that type?

A A dust mask. It's basically just a typical dust mask you see painters and stuff will put on. It just does not seal around the face and so those provide no respiratory protection.

Q So what do you need for asbestos?

A You need an actual respirator which actually seals

around your mouth and your face.

Q What's the significance of this next quote, the next quote there?

A Where it starts "As a rule"?

Q Yes.

A Well, as far as the concept of industrial hygiene goes, there's steps you take. One dealing with hazardous materials. One is an informational step. It's informing people of that; is it a hazard; how do you treat it. If you're going to be working with it, the next step may be the negative air machine. You're actually doing a mechanical process dealing with it.

The last step you do is put a person in a respirator, because again, it's dealing with the amount of risk involved. So putting a person in a respirator, you've kind of dropped off the others and the highest risk is now -- the person is now up to the highest risk level.

Q How does this -- it talks about mask or respirators should be used only where the exposure is intermittent and brief. How does that compare to what insulators have in their exposures?

A I would say their exposure is not necessarily intermittent or brief. Since they're working on it continuously, they're continuously generating dust.

Q So do you have an opinion then about the protection that an insulator would get from wearing the masks or respirators?
A Well, I mean you can go into the different levels of respirators. I mean today, if a person is going to be working with that kind of property -- that kind of product, then they're put in what's called a PAPR, which is a powered air purifying respirator. It's not the highest level of safety, but it's pretty high up there.
Q And that's a level of protection that would be used if it was a breathing-type protection for an insulator, is that what you're saying?
A If -- compared to today's standard, if you're removing that type of material, that's the type of respirator you would have to be in.
Q This is -- the next publication is by Lawrence. Also National -- is this National Safety Council?
A Yes, sir.
Q Is there anything additional that this publication adds to what you've already talked about?
A Two things on here. Again, I kind of mentioned it, that he's recommending the asbestos be dampened is the word he uses and also he's bringing the concept of periodic medical examinations for the workers.
Q Okay. Now, continuing here. You had included a

reference to this publication by Merewether as part of the slides on dangers of insulation dust. What does this add, in addition to what we've already talked about?

A Well, it just kind of complements it and it kind of goes back to what I said a little bit ago. Again, he's talking about the size of the dust particles and pointing out that it's basically the invisible ones you can't see which really can do the most harm to you. So even though you may be seeing some, just because you don't see any dust in the air doesn't mean there is not a hazard there.

Q Okay. I want to go back into the 1940's, 50's and 60's. What types of activities did insulators perform on piping systems that caused exposures if they worked with asbestos materials?

A Well, the easiest way is the one as Dr. Balzer has laid it out as part of his studies. They've got the prefabrication, the actual installation, mixing -- if you want to go up a couple more slides. One more. If you want to bring all those up: Prefab application, finishing, tear out, mixing.

Now, one thing to note, he lists a series of percentages, and those would be all average percentages you would expect a worker to do. But reality is for an

insulator, an insulator may be doing nothing. But a prefabrication, prefabrication is cutting the insulation into the right sizes to be installed. The application is the person who is applying it. The finishing, that's the person who is actually doing the finish work, putting on cloth material, adding the mud to the joints and along the seams.

Tear out, kind of obvious, it's the person who's removing the insulation. Mixing, again that's a mixing of the mud. It's a dry powder mix, put in a bucket, add water to it, and they use a mixture to mix it up. And then the general on here is clean up. It can be moving boxes, that kind of stuff.

But again, to go back to the concept of what an insulator does, if you're working a job where all you're doing is tearing out, then the entire time you're there you're doing tear out. I mean so you're not -- that one person is not doing every job. So one person may be doing the fabrication. He may be cutting the insulation, handing it to somebody else. Or they may have a person there who is just doing the mixing all day long.

Q So these activities from Balzer are sort of like averages of what insulators would do over their lifetime, percentages, and it would vary maybe from job

to job what they're actually doing?
A Correct. Or another way if you look at it is what has to happen on a typical job. A typical job you could say well, 10 percent of it is going to be prefabrication. You can break it down in that form too.
Q And have measurements been made of the fiber release during these types of activities for insulators?
A Yes.
Q That's the earlier charts we had; right?
A That's correct.
Q I'm going to go back to those.
A Okay.
Q Okay. These are ones that you prepared; right?
A That's correct.
Q All right. So the first one is titled personal-removal. What's this refer to and where did you get the data from it?
A Well, the placing of the data from you can see on the right-hand column. Those are the names of the articles and the dates. This is an individual insulator who is actually doing the physical removal. The column on the left says *Total*. Those are the total number of samples that were involved in the average. And then the column next to that, those are the actual sample results. And at the bottom of that we have an average.

MR. CASMERE: Can I have a clarification as to whether these are fiber per CC results or something else, Your Honor?

THE WITNESS: Fiber per CC.

BY MR. MCCOY:

Q What does that mean, fibers per CC?

A Well, that's just the -- it's the fibers per the volume of air is essentially what it breaks down to. So it's part of how they do the analytical. They count up a certain number of fibers. They have an equation that he fits it in based on the amount of volume of air that's run through the cassette and your result is in fibers per CC.

Q And how are those fibers actually measured?

A They're counted. They look through a certain microscope, we call it a PCM microscope, and they literally are just counting -- what they typically do is they'll take a PCM, which is a circle, cut out a quarter of it. They put it on a plate and they basically look at 100 spots on it and they count how many fibers that meet a certain criteria, and based on that number, once they do the calculation, that's where you get the fibers per CC.

Q You said PCM? Is that a technique?

A Phase contrast microcoscopy, yes.

Q When did that become a method for counting the fibers?
A Well, it certainly became standard with OSHA regulations. That's how -- OSHA kind of standardized that for everybody to be counting the same way.
Q When was that?
A Well, OSHA came in in '71, so when the actual regulation -- I guess, what, '71/'72 is about that time when it --
Q So was PCM available then before OSHA?
A It was, and I couldn't give you the specific date. I mean there were other methods that were being used prior to that though.
Q What were the other methods?
A Well, one of them that typically you'll see is the impinger. And the impinger, essentially you're drawing air through a liquid and whatever is in the air gets trapped in the liquid. And then they set that up on a plate and they look through a microscope and count the dust particles in that is essentially how that works.
Q Was there a change then in using impingers to PCM that took place?
A Again, that would be -- would solidify when OSHA came in because OSHA recommended that.
Q Why did that change occur?

A Well, the impinger -- you're getting all dust, so it's not necessarily asbestos fibers in there. So with OSHA, they wanted a more standardized form that focused more on the fibers. They also have it organized more in a fashion where -- I don't want to say this in a rude way -- but almost like anybody could read these and get the same type of results from one person to another across the country.

Q Is that PCM that you're talking about now where it was everybody could get the same results more easily?

A Basically, yes.

Q Okay. So what you're saying is essentially the impinger method was not as precise for asbestos as the PCM.

A Correct.

Q Okay. I'm going to move on then to the next -- first off, this personal-removal now, was this for insulators being studied?

A This is for insulators being studied, yes.

Q Okay. Now, when -- you reviewed information about the work of Mr. Suoja; right?

A Yes.

Q You looked at what to understand his work?

A There was two depositions. One is Lawrence Zimmer and George --

Q Schlub?
A -- Schlub. Okay.
Q S-c-h-l-u-b?
A L-u-b, yes.
Q Okay. Was there anything in their description about Mr. Suoja's work or the work they were doing with him that would be inconsistent with any of the testimony you're giving here based on the studies of insulators?
A No.
Q Okay. So in terms of these personal removal fiber counts that you're providing here, are these fiber or dust counts I should say?
A These are fiber counts, five million per CC.
Q In terms of these fiber counts, would these then be applicable to the type of work Mr. Suoja was doing?
A Yes.
Q You also have NIOSH cited as a reference, 1972. What did they do that's relevant here to get those studies?
A Well, that document, they actually study a variety of different asbestos activities, products, I believe even factories where things are being manufactured.
Q The Balzer work, is that like a field study of insulators working?
A The first one is. The second one, 1972, that is

more of a simulation.
Q Okay. And personal, when you say personal -- we know what removal is, but what's personal mean?
A Personal is these samples represent what would be the person who's doing the removing's breathing zones, what he's breathing.
Q Have you yourself had to do personal samples?
A Yes. I've set personal samples on workers, yes.
Q Next slide is titled *Personal-installations.* So now we're talking about samples of people installing?
A That's correct.
Q Is this pipe covering?
A Yes.
Q Okay. So the data that you're using here, can you just describe for us what the significance of the reports are for the --
THE COURT: Mr. McCoy, before we go into this, could I ask for an informational question?
MR. MCCOY: Sure.
THE COURT: Is there any claim here that Mr. Suoja installed Owens-Illinois product, Kaylo?
MR. MCCOY: I believe that's an inference that could be drawn from the testimony of Mr. Zimmer. And we'll lay this out. Mr. Casmere spent longer than me on it, but we'll lay that out in the briefing.

THE COURT: Okay. Well, if that's part of the claim, then please continue. I was not clear on that.

MR. MCCOY: It's primarily removable, but there is that installation on that first job.

THE COURT: Please keep going.

BY MR. MCCOY:

Q All right. So the question, Mr. Kenoyer, is what's the significance of this data on personal installation to evaluating Mr. Suoja's exposures?

A Well, just looking at the numbers, to me -- again, the way we typically will do this, like we say in the report, is we compare what the numbers would be to what is the baseline outdoor or indoor concentration would be. And we had the numbers in there. Without belittling it, it's ten to the minus 4, so it's a small number. So basically if you're looking at this, which has got an average of 16, you're essentially talking about a million times higher than what's a baseline of outside.

Q And when you say outside, you mean in like the air outside as people are on the street?

A Well, it's outside. It's also representative of what covers a range of what would be in normal typical buildings which not having an asbestos problem in them.

Q How would you characterize then an exposure like

that that's a million times higher than the normal air?
A I would call that significant.
Q And what does significant mean in the industrial hygiene profession?
A Well, the way we term it is, and again, without kind of -- you know, it's every decimal point, you know, you get away from the baseline, that the more -- you get across then the more significant that number becomes. It's just a striking comparison of numbers.
Q How does this kind of exposure relate in terms of the risk for this particular type of activity of this profession?
A It's going to increase the risk.
Q Increase the risk of what?
MR. CASMERE: Your Honor, I'm sorry. If he's going to give a medical opinion, I feel compelled to stand up.
MR. MCCOY: It's not medical, Judge. I mean this is --
THE COURT: Well, how can he talk about causation of diseases from increased risk? What's his basis of knowledge?
MR. MCCOY: Well --
THE COURT: If he's got it, you can ask him.
MR. MCCOY: I'll lay that.

THE COURT: Mr. Casmere, I'll let you cross-examine. I understand your point. There's no jury. Let's just keep going.

MR. CASMERE: Okay. I'll sit down.

BY MR. MCCOY:

Q Do industrial -- the profession of industrial hygiene deal with risk of exposures?

A Yes.

Q And can you explain how that works for asbestos?

A Again, you're -- typically you're looking at what the sample results are and you're comparing them to -- we can compare them to what his background is. Some circumstances you may want to compare to a regulatory number depending what the circumstance is such as OSHA. The higher you are above that number, then the higher the risk is.

There's also a risk -- and I know he's concerned about the medical, but there's the medical risk, which is one thing. But just as an industrial hygiene, you're looking at what is the overall risk from an activity.

THE COURT: Okay. I'm sorry, but please clarify. You differentiated overall risk from medical risk.

THE WITNESS: Well, the medical risk would be -- it's the true epidemiological studies where

somebody is doing a study over a population. Now, we'll -- they'll say okay, based on this population doing this work, they're going to have this number of risks of getting the disease.

And what we're looking at is from a worker safety point of view, and in that case, the risk is is this person going to be exposed to a hazard. You could say yes or no. And then the question is what, you know, how big of a hazard is that? You could say well, that's a small hazard because maybe the numbers are close to background, for example. Or in this case, you've got a background which is one number and you're a million apart. Well, that's a big risk. That's a big differentiation. So based on that, you make a decision of how you're going to offer some kind of protection. Because like we always said, you can do the mechanical protection. You can remove the product. You can get a substitute. Or at the very end, you put a person in a respirator. So that's a distinction I would look at when I'm talking about a risk in a situation.

THE COURT: Just to make sure I understand -- Mr. McCoy, I'll turn it back to you in just a moment -- but the distinction I hear you making right now to me is the risk that you are concerned about is all medical. You're just not differentiating what will result from

that risk. That would be the medical epidemiology.

THE WITNESS: Yes. Because ultimately anything we do in industrial hygiene, and again even to the extent of how high a person climbs up on scaffolding, there is a risk there. He may fall, that's a known risk, and break his leg or something and I can recognize that. Now, I'm not the medical doctor who's going to say yes, you have a broken leg. So that, I guess, is the distinction I would make. The risk.

THE COURT: I understand. Thank you.

Mr. McCoy, back to you.

BY MR. MCCOY:

Q Mr. Kenoyer, in terms of the different occupations that have been reported to have asbestos exposures, how do these numbers for the insulators' work compare?

A Pretty much the only ones off the top of my head which would be higher would be people working with fireproofing, spray-applied fireproofing, doing the spraying.

Q The data that we're looking at here on this chart, is that collected by the same types of methods you talked about?

A These are, yes, and they're all fiber per CC.

Q Are these insulators?

A Yes. And not to be confusing, but if you see

fibers per CC or fibers per milliliter, it's the same thing. Some people will use it one way, some people use it the other.

Q Milliliter is the same as --

A Yeah. It's just how they did the math and did the measurements, yes. But it's the same result.

Q All right. So the next chart, bystander-removal, is this also reflective or derived -- that's a bad question. Is this also measurements reported for insulator's work?

A That's correct. And again, it's not millimeter, but it would be fibers per CC.

Q What does it mean when you say bystander?

A Well, for example, for an insulator who's doing the removal, these samples would represent the person standing next to him.

Q Do any of these bystander exposures that you're looking at here go -- maybe I should say standing next to him, how far would that distance be?

A I'm not sure if all of them say, but the simulation one with Balzer in 1972 I think -- I think it ranged, they were talking maybe five to ten feet. I mean it's in a simulation, so they're in a -- they built a room essentially to do the simulation in.

Q How does that matter if someone is working with

like a crew of insulators?
A Well, obviously you're going to have variability based on that circumstance because you can have somebody to the right who's maybe actually ripping insulation off and somebody on the left who's not. It may go vice versa. So basically what you can do is accept these as basically the average type of exposure persons can have.
Q And so this once again is data of insulator's work?
A That's correct.
Q And the final slide is bystander-installation?
A That's correct.
Q Okay. And is this also then insulator work?
A Yes, it is.
Q That slide we've already looked at?
A Correct.
Q Are these then the pictures of types of materials that the insulators were using?
A Correct.
Q This would be what form here?
A I would call that a block.
Q Okay. And this one would be what?
A I'd call them half rounds.
Q Are you familiar with the product Kaylo itself?
A Yes. Yes, I am.
Q All right. So what I want to ask is if you have an

insulator who's got a 40-year career of asbestos insulation work starting in '43 through '85, is it necessary to actually have to calculate out all of his exposures to evaluate the significance of the risk?

A No. You don't need to calculate it out all the way.

Q Why do you say that about an insulator?

A Because I know the kind of exposure he's going to have. Just based on the numbers we were just looking at and knowing what the background numbers are, I mean you automatically can reason that that's going to be a high-risk job for asbestos.

Q Okay. What does the term or terminology *low-dose exposure to asbestos* mean to you in the industrial hygiene profession?

A Well, the low dose brings into question what is a dose. The simple form of dose is the amount of a chemical or something that your body takes in and it gets added up over the lifetime is basically what they're saying. So when the low dose, when they're talking about that is they're looking at, for asbestos, low exposure numbers over a long period of time where you have a very small total dose and the question is in those scenarios is that enough or at what point is that enough for you to have an asbestos-related disease.

Q Have you reviewed in the literature about low-dose exposures?
A Yes.
Q And these are quotations that you pulled out of certain articles for us; right?
A That's correct.
Q Okay. The first one is the Iwatsubo. So what I want to ask you is what's the importance in the context of an insulator of a low-dose exposure to asbestos?
A You don't have a low-dose exposure to asbestos.
Q Okay. So what's the importance of low-dose exposures then for this type of a case?
A Again, it's the idea of trying to find out what a baseline is, what somebody who is doing some type of work can get an exposure to some degree and will have -- increases his risk so he gets a chance of getting a disease. So this is sort of like where the baseline of it is.
Q So even if you had only much lower exposure than insulators, this is a summary of what that risk would be in these slides; right?
A That's correct. And the key points, which I'll kind of summarize here quickly, is a lot of these point out that there is no -- well, there is a dose response relationship meaning the amount that you're exposed to,

there is a corresponding relationship. That other aspect is that they are not finding that there is a threshold limit and that essentially means that if you go below this dose, that you have no risk of any disease.

Q How does this work for mesothelioma specifically?

A Well, that's where a lot where the issue of low dose comes into.

Q What's the findings on the low dose in mesothelioma?

A Again, there is a dose-response relationship and there is no threshold, bottom threshold.

Q What do you mean when you say there's no bottom threshold for mesothelioma?

A Well, what --

THE COURT: He just told us. I mean now you're just asking him to repeat himself. So let's move on.

MR. MCCOY: I wasn't sure if you -- okay. I appreciate it, Judge.

THE COURT: I am listening, Mr. McCoy. So let's try new questions.

BY MR. MCCOY:

Q Okay. So the next article is Hillerdahl. Does that provide any additional information on low dose mesothelioma?

A Yeah. That's basically just kind discussing the same topics, yes.
Q Rodelsperger. Does that provide any additional information on the low dose?
A Yeah. He's defining it a little more precisely as including a number of less than 0.15 fiber years.
Q What does that mean, a fiber year?
A Fiber years would be the -- again, it's your asbestos dose over "X" number of years. It could be your lifetime. So it's based on your exposure that's added up for "X" number of years.
Q So what does it mean when it says a significant OR? What's OR?
A That's an odds ratio.
Q Okay. And what's this mean when he says odds ratio calculated even for the lowest exposure category and then he's got that formula?
A Well, what that -- the basic aspect of the odds ratio, going to statistics here, is that it is the probability of getting disease from an exposed group as the probability of getting a disease from an unexposed group. And basically all they're saying, if your OR is a positive number, then you have an increased risk. And so here he's saying that they've got a solid -- a significant -- that significance is a statistical

word -- OR for a number that's greater than zero and less than 0.15.

So again, they're just going back with the concept there's a low-dose level and there's also no threshold is basically what he's saying.

Q And again, a fiber year represents what period of time or what amount?

A Well, the period of time could be your lifetime.

Q Okay.

A I mean it could be your occupation period of 20 years. So that, depending on what you're trying -- what question you were trying to answer.

Q So what does it mean in terms of amount to have a fiber year?

A That would be representative of your total exposure.

Q Is there a quantity associated with that beyond -- you used the terminology of one fiber year?

A I mean you can calculate. I'm not sure what you mean by quantity other than if you're going to calculate somebody's fiber years.

Q Go ahead. How would you calculate a fiber year?

A In the most simplest terms if you wanted to do that, say you have an exposure -- and we'll go back to those slides, say 15, and you just want to know what

would be his dose for one year of working. And you assume he's working 40 hours a week, 50 weeks a year, well basically all that is is the exposure times the number of years. So in this case, it's one year, so he has fiber years of 15.

Q If it's exposure, the 15 means 15 --

A Fibers per CC.

Q Okay.

A Doing that work, and assuming he's doing that 40 hours a week, 50 weeks a year.

Q Okay. So it's based on that exposure of 15 fibers per CC occurring during a 40-hour week for a year?

A That's correct.

Q And that would be 15 fiber years.

A That's correct.

Q Okay. The next article you have on the low dose is Lacourt. And what else does this add to what we've already talked about?

A Nothing really. He's just -- they're just backing up what's already being said.

Q And finally, you've got an article here by Markowitz. What's that add to this on the low dose?

A Again, other than this, it's just repeating the same thing. It's just this is now 2015, and Markowitz, actually what he's doing is he's looking over a variety

of studies that have been done. So he's not just doing it on his own, he's looking at some of these other studies that we talked about also.

Q Okay. Now, I'd like to go back to Oswald Suoja for a moment and just ask you to assume he's got one month or more of work installing a pipe-covering insulation before the end of 1958 or removing a pipe-covering insulation. How would you characterize that exposure for an insulator?

A I would characterize that as being significantly high, even for that short a period.

Q And why do you say that?

A Because again, we can go back and look at what those actual exposure numbers were. I mean some of them are 15, 16, and if you just think about what that dose -- if he's doing that, you know, eight hours a day for even a month, that's going to be way above what these low-dose studies are talking about.

Q You stated in your report here, Opinion No. E, "Since the 1930's working with around hazardous containments in the workplace, the need for appropriate training and appropriate respiratory, adequate engineering controls are recommended. Asbestos was included among these workplace hazards. Good industrial hygiene practices would have included warnings." How

did you come to that conclusion?
A That is basically from those documents that we looked at earlier dealing with the dust, dangers of dust.
Q And that's an opinion specific to Mr. Suoja -- your knowledge of Mr. Suoja's work?
A That's correct.
Q All right. So changing subjects a little bit, has -- was -- has asbestos over the years then been the subject of industry guidelines or government exposure limits?
A Yes.
Q And going back in time to the 40's, what were the ones in place at that time?
A The ACGIH established five million particles per cubic feet of air in 1946.
Q Per cubic what?
A Cubic feet of air.
Q Okay. And the ACGIH was what type of an organization?
A It's a professional organization. It's American Council of Governmental Industrial Hygienists.
Q It's not a governmental agency.
A No.
Q And how did they get information to establish that

five million particles per cubic foot? Did they do any testing themselves?

A I don't believe they did testing themselves. I think they reviewed other people's studies.

Q Okay. And do you know when this five million particles per cubic standard was introduced?

A By them I think it was 1946, although others were talking about it prior to that.

Q Okay. I've moved on to the next slide you prepared which has got Balzer 1968 at the top. Is that that same Balzer article you've talked about already?

A It is. And again, all we're showing here, giving you an idea what the type different of work categories and he's got a series of samples -- this dotted square just kind of represents his sample range. That's the number of samples fall in that. The line with the dot in there, that's the average. And then he's got a bracket which is called the error range on that.

That big dotted line that runs up and down through the whole thing, that's that five million particles per cubic feet. And you can see how on certain job categories the average is above that five, and that's prefabrication, tearing out, and mixing. Those are the highest ones. But even other -- most of the other ones, except for the general, have some range of numbers that

are going to be above that five. And again, you go back to that data we produced up there, that corresponds pretty well with what those data points are showing up there.

Q Okay. This is all insulator data?

A This is insulator data.

Q Your next --

A Okay.

Q -- slide is called -- titled *Concentration Comparisons*. Why don't you explain how these relate to what you've been talking about.

A Okay. What I want to do is just do kind of a way of graphically representing what these numbers kind of mean because people can get kind of lost in there. So the ambient outside range, I said 10 to the minus four, so it's 0.0001 is going to be our floor, our bottom. The 1946 ACGIH, that's the five million particles per cubic feet.

Now, in the other document which you have, the ATSUR, there is a way of converting that into fibers per CC, basically multiplying by 3. So that's what I did. So instead of having 5, I now have 15. The bottom one, this comes from a couple documents which is in our general report produced by Calidria, who is an asbestos producer. They're basically saying if you can get to

the point where you see visible dust in the air, you're at 8 to 10 million particles. So I just did the conversion again, multiplied by 3 that's 24. So just as a comparison, if you switch to the next when you're ready.

Q Sure. When you're ready. Okay. There we got it. Next slide.

A So basically this is sort of what we're dealing with. The one ambient, that's the background. That's kind of the normal. Everything exposed to. When you compare that to the ACGIH, which now is at 15, you can really see the stark difference in those levels.

Now, the next one, that's when you get visible dust. Now, go back and look at all those studies that -- the numbers I have in there, and you'll see that he's working in this area, you know, with the ACGIH, the visible dust. That's his type of exposures. So I just did this so you can actually kind of get a better feel for looking at something other than numbers.

Q So when you say ACGIH, now you're talking about the five million particles per cubic foot?

A That's correct.

Q That was the other slide that had the dotted line vertically showing that; right?

A That's correct. And if you go back and look at

that, that corresponds very well to this too.
Q So what does the significance here mean when you have a comparison of the five million particles per cubic foot and visible dust?
THE COURT: Well, we've been through that. That was the Calidria article. That's 8 to 10 million parts. Let's keep going.
MR. MCCOY: All right.
BY MR. MCCOY:
Q And you said insulators are working primarily in what range?
A Well, if you look between these two tall bars, the ACGIH and the visible dust, that's the areas where they're working.
Q Some of the exposures can be higher a little bit and some of them can be lower.
A That's correct.
Q But most of them you're saying are in that.
A On average they'll fall into that range.
Q Okay. Have you seen in your work -- well, first off, the term 85 percent magnesia and the term calsil, are these terms you're familiar with?
A Somewhat, yes.
Q And does that represent some kind of a chemical difference?

A Well, they're -- yeah, there's a chemical difference between them, yes.
Q And what chemical is different from there?
A Well, one of them has magnesium. I don't have the chemical formula so --
Q Okay. And in terms -- what does the magnesium serve as?
A My understanding is they're used as fillers for making the asbestos pipes.
Q Okay. So you've encountered both types?
A I'm familiar with both types, yes.
Q Okay. Has there been, in your experience, any type of difference visually between those two?
A Not that I'm aware of.
Q To the naked eye.
A To the naked eye.
Q All right. Now, what I also want to cover here is -- we covered that. Okay.

This five million particle per cubic foot standard which was an ACGIH guideline you said about 1946; right?
A Correct.
Q Okay. Has that been lowered over time?
A Well, that has been replaced. It was replaced by OSHA in particular.
Q What happened to it?

A They just got rid of that standard and put a new standard in.
Q Okay.
A The only difference is they're using fibers per CCs as for the PELs.
Q And how does the standard that replaced it compare in terms -- can you make a comparison between the fibers per CC standard and the OSHA standard that came about?
A Well, the OSHA standard reduced the levels, concentrations.
Q Reduced what had been the guidelines of the ACGIH?
A Correct. They did it over a number of years down to 0.1 fibers per CC now.
Q You're familiar with the -- this is Exhibit No. 222.

MR. CASMERE: Just give us a year, please.

BY MR. MCCOY:
Q And that's a 1971; right?
A That's correct.
Q Okay.

MR. MCCOY: Here is a copy, Judge. I don't have a slide.

THE COURT: I'm sorry, the number for this was 222?

MR. MCCOY: Right. Plaintiff's 222.

BY MR. MCCOY:
Q So this 19 -- what is this document?
A Documentation of Threshold Limit Values for Substance in Workroom Air.
Q And what does it mean when it says *Documentation*?
A Well, I think all they're saying is as they go through, they do documentation of what are the threshold limit values. That's my understanding what this means when they say the documentation.
Q Okay. Documentation meaning the documents that they were based on?
A Well, this is the documentation of what these values are.
Q Okay. And this is an ACGIH publication?
A Yes.
Q Okay. Committee on threshold limit values. Is that threshold limit value, is that like a five million particle per cubic foot?
A Oh, yes. That would be, yes.
Q And so that's a 1971 edition; right?
A Correct.
Q And what does that provide in the way of additional or newer information about the five million particle per cubic foot guideline?
A Well, in this they're switching it to five fibers

per milliliter.
Q And what does that state about the basis or the reasons for the changes?
A Well, they just go through a process of where they're talking about where it started off with Dreessen, where he came up with a five, and then he goes through a process of dealing mainly with asbestosis. Then they raise the concern of increasing cancer among asbestos workers and they go through review of the Committee of Hygiene Standards for the British Occupational Hygiene Society. Basically they come to the conclusion that the five cc limit is not sufficiently low, at which point they recommend coming down to five milliliters.
Q All right. And since that time it's dropped even further?
A That's correct.
THE COURT: Mr. McCoy, let me just ask for housekeeping purposes, will you be done with the direct by noon?
MR. MCCOY: I think I'm done here.
THE COURT: Didn't mean to rush you.
MR. MCCOY: I was just checking my notes here. Judge, I'm finished with my questions. I didn't know in terms of offering actually these exhibits, I assume

that's going to be done afterwards in the post-trial briefing.

THE COURT: Yes. And consistent with my statement to Mr. Casmere before, nobody leaves the courthouse at the close of the evidence until we all know which exhibits are in and which exhibits are out. And we don't have to do it as we go. But to the extent that an exhibit needs a foundation from a witness, I'd like that done. But we don't have to agree today as to what's in and what's out. So if you want to offer that now, subject to them objecting to it, that's fine.

MR. MCCOY: Okay. I'm offering the exhibits that we tendered here, including the PowerPoint.

THE COURT: Okay. Mr. Casmere, are you in a position to tell me now, subject to your general objection to Mr. Kenoyer's entire line of testimony, any separate objection to the exhibits? Or would you like to reserve and get back to the Court on that?

MR. CASMERE: I just have I guess a question. Most of these are what we would consider like 803.18, state of the art type literature. And so from having them go into the record, I have no problem with that. But having them be admitted as evidence for the substantive evidence, that I object to because I don't -- under 803.18.

THE COURT: Understood. And Mr. McCoy, can you tell the Court now which fork of that road you're taking? And if you can't, you can reserve on that. But Mr. Casmere is entitled to know. Do you understand the question he's asking?

MR. MCCOY: I certainly understand 803.18 very well, yes. I'm just trying to think if there's anything that's not in that category. I guess CV's --

THE COURT: Well, that's different. I don't think he's worried about the CV.

MR. MCCOY: I mean the general report is not really 803.18, it's just foundation for his qualifications.

THE COURT: Right. But he's not asking about the general report, he's asking about the background documents that you questioned Mr. Kenoyer about. Tell you what, I don't want to waste Mr. Kenoyer's time while we go through that. The objection is there. Mr. McCoy, I'll give you the chance with Mr. O'Connor -- I'm sorry, with Mr. Hausman's assistance to sort that all out at the appropriate time. But we don't need to do that now. Okay?

MR. MCCOY: Okay.

THE COURT: Would you like a five-minute break before we do the cross?

THE WITNESS: Yes, sir.

THE COURT: All right. Let's take a five-minute break.

(Recess 11:33-11:38 a.m.)

THE COURT: We're back on the record. Let's continue.

MR. CASMERE: Thank you, Your Honor. May I proceed?

THE COURT: You may.

CROSS-EXAMINATION

BY MR. CASMERE:

Q Mr. Kenoyer, let's start with something easy. This photograph of this block material from the presentation, is that asbestos containing or not?

A I would have to sample it to be able to positively ID it.

Q Is that calcium silicate or 85 magnesia?

A I don't know.

Q What year was this manufactured?

A I don't know. It's just used as a example.

Q Who manufactured it?

A I don't know.

Q You can't tell just by looking at it, can you?

A No.

Q Same question. This insulation, the half round

that was in your presentation, is that same answers?
A Same answers.
Q You can't tell what it is or who made it or when; right?
A That's correct.
Q Can you tell the Court where you got your Ph.D. in industrial hygiene?
A I don't have an Ph.D. in industrial hygiene.
Q Okay. How about can you tell the Court where you got your master's degree in industrial hygiene?
A I don't have a master's degree in industrial hygiene.
Q Can you tell the Court where you got your bachelor's degree in industrial hygiene?
A I don't have a bachelor's degree in industrial hygiene.
Q As a matter of fact, you never even took a course in undergraduate or graduate school that had the name industrial hygiene in the title.
A That's correct. It did not have the name industrial hygiene in the title.
Q You're not a certified industrial hygienist.
A That's correct.
Q You've never sat for the certified industrial hygienist examination.

A That's correct.
Q Does the American Board of Industrial Hygiene recognize you as an industrial hygienist?
A Probably not.
Q Well, you'd know it if they did, wouldn't you?
A I've never spoken to them.
Q Do you even know what the qualifications are required by them to be a certified industrial hygienist?
A Essentially you end up having to take a test.
Q I'm not asking essentially, I'm asking if you know what the requirements are for that organization to become a certified industrial hygienist. Do you know?
A You put in an application and you take a test.
Q That's it?
A As far as I'm aware of, yes.
Q Have you ever applied?
A No. Now, as to how I know that, because the person I worked with, Ken Garza, did get his industrial hygiene. He has a BS in biology and a master's in environmental science.
Q I understand you may work with people who are actually industrial hygienists, but I want to talk about you for a few minutes. Okay?
A Sure.
Q Are you a member of the American Industrial Hygiene

Association?
A No.
Q Do they recognize you as an industrial hygienist?
A I don't know if they're even aware I'm here.
Q You said ACGIH? You said that term earlier?
A I believe so, yes.
Q What does that stand for?
A America Council of Government Industrial Hygienists.
Q That's not right. Do you want to try it again?
A Are you sure that's not right?
Q American Conference of Governmental Industrial Hygienists.
A Oh, American Conference.
Q You're not a member of that organization, are you?
A No.
Q Do you know what it takes to become a member?
A No.
Q Do you know if they recognize you as an industrial hygienist?
A I would doubt if they even know who I am.
Q As a matter of fact, you've never applied for a membership in any professional organization related to industrial hygiene.
A That's correct.

Q Your bachelor's degree focused on how electrical circuits work; correct?
A In part. It was more solid state physics, but yes.
Q You describe solid state physics as how the electrical components or circuitry works.
A Yeah, but it's more the material form of it, not as most people think of electrical circuits.
Q No training or work in industrial hygiene as an undergraduate; is that right?
A Training or work in industrial -- no.
Q That's right. I'm correct.
A That's correct.
Q What year were you born by the way?
A 1958.
Q What year did you graduate from -- with your bachelor's degree?
A 1990.
Q In 1990, is that when you went to work for Astex?
A Yeah, approximately. Yes, '90.
Q Your work experience prior to that was working in restaurants?
A That's correct.
Q Your master's in environmental science, I believe you've described that as doing a variety of things that dealt with water resources, statistical work, and some

other math; right?
A That's a general way of saying it, yes.
Q Nothing specific to industrial hygiene there either.
A Well, the statistical work does apply to industrial hygiene. I also took course work in -- there's a quantitative analysis which deals with the instrumentation involved in chemical analysis.
Q What I heard you just say is that you do math in industrial hygiene so that your math and statistics work and your graduate applies to industrial hygiene; is that fair?
A They do apply to industrial hygiene.
Q Do you hold yourself out as a medical doctor?
A No.
Q How about as a toxicologist?
A No.
Q How about as a microscopist?
A No.
Q How about as a registered safety engineer?
A No.
Q How about an epidemiologist?
A No.
Q You have agreed that you are not a warnings expert?
A That's correct.

Q You have not studied the effectiveness of warnings in the workplace.
A That's correct.
Q You are not qualified to testify about what types of warnings are effective for changing worker behavior, are you?
A That's correct. No, I'm not.
Q You have no knowledge about the history of warnings.
A No, not really.
Q You have never published any papers on asbestos; is that right?
A That's correct.
Q You have one publication listed in your CV and it has nothing to do with asbestos; right?
A That's correct.
Q As a matter of fact, do you know whether that article -- it was published in what journal?
A I think it's Microscope is what it's called.
Q The Microscope. Do you know if that's a peer-reviewed journal?
A No, I don't.
Q Do you know what a peer-reviewed journal is?
A Yes.
Q Explain it.

A Essentially when people submit a study or a report, that study report gets handed off to other "experts." They do reviews, they criticize it, may want to recommend changes, something like that, and then it gets sent back to the original authors. They may reject it or they change it and resubmit it.
Q This article that you published or that you list on your CV as having published in The Microscope, what was the subject of that article?
A That had to do with coal ash soot.
Q And how much of the actual written word that was published did you write?
A None. I was just asked to review it.
Q You were just asked to read it by the authors?
A That's correct.
Q And then you put your name on it as one of the coauthors?
A They put my name on it. That's why they wanted me to review it.
Q Have you ever taught any classes at an accredited university in the United States of America on industrial hygiene?
A No.
Q How about anywhere in the world?
A No.

Q Now, your company --
A I've done training for HAZWOPER in various hospitals.
Q I'm asking about universities, sir.
A Oh, you just said anywhere in the world. So I thought you were expanding that.
Q Anything else you want to say about that?
A No, that's all.
Q Your company, Gobbel Hays, has never billed you out as a senior industrial hygienist, have they?
A Probably not.
Q They have never billed you out as just a regular old industrial hygienist either, have they?
A They typically would probably bill me out as a project manager or now I'm basically as an office manager for them.
Q Well, what you told my partner a couple weeks ago was that the entire time you've been with Gobbel Hays, you've been billed out as a senior project manager; is that right?
A Yeah. I'd to look -- I also told him I'd have to look at the actual -- how they label it on the invoices. But when they --
Q Did you do that?
A No, I have not. But when they list a person,

employee, and what they're going to bill at what rate, they have their category set based on that rate.

Q As a matter of fact, have you gone on the Gobbel Hays website recently?

A No.

Q Your company doesn't even list you on the website as an industrial hygienist, do they?

A I don't know. I haven't been on there.

Q I went on there over the weekend. Do you want to see what it says?

A Sure.

Q Can you read that or do you need me to zoom in?

A No, I can read that.

Q Does your own company list you as an industrial hygienist on their website?

A No. They list it as an environmental scientist.

Q Mr. McCoy, asked you some questions about your expertise in testifying and that you've done a little bit of work for his firm; right?

A Yes. As far as testifying, yes.

Q This is the first time you've ever walked into a courtroom and sat down to testify as a "expert"; right?

A No.

Q In asbestos?

A Asbestos, yes.

Q Let me ask that in a better way. Have you ever testified as an expert -- as an expert in asbestos before today?
A No.
Q Has any court in the United States certified you or said that you're qualified to testify as an expert on asbestos, in industrial hygiene?
A Not that I'm aware of.
Q Now, the fact of the matter is that Mr. McCoy's firm has hired you and your colleagues several hundred times in the last couple of years to give testimony; right?
A That's correct.
Q He mentioned that there were other people, other lawyers I think he said that had hired you to testify as an industrial hygienist in asbestos cases; right?
A A few, yes.
Q Three; right?
A I don't know the number off the top of my head.
Q You testified once for the Waters & Kraus firm?
A That's correct.
Q You never testified for them again.
A That's correct.
Q You testified once for the Salls (ph) Tillery firm out of Kentucky; right?

A That's correct.
Q You testified once for them, never testified again; right?
A That's correct.
Q And the third name -- do you remember who the third firm was?
A It was Weitzel and --
Q The Weitz & Luxenberg firm out of New York. You testified for them once; right?
A They were out of California were the ones I was testifying for, yes.
Q You testified for them once.
A That's correct.
Q Never again.
A Never again.
Q In asbestos cases, the only firm for whom you have testified more than once is Mr. McCoy's firm; is that right?
A That's correct.
Q The only presentation regarding asbestos that you list on your CV, there's only one of them; right?
A Yes.
Q That was a presentation that was supposed to be given by your colleague Mr. Hays; right?
A That's correct.

Q He got sick or injured a couple weeks before that presentation. You stepped in and gave that presentation.
A That's correct.
Q So far that's the only presentation you've ever given on asbestos; is that right?
A That's correct.
Q You currently hold no professional licenses that identify you as an industrial hygienist.
A That's correct.
Q You currently hold no professional licenses that have anything to do with asbestos.
A That's correct, yes.
Q You used to; right?
A Used to.
Q But you gave those up about ten or twelve years ago; right?
A That's correct.
Q And you gave them up because you were tired of dealing with contractors.
A That's part of it.
Q So that we're all clear, those licenses you had were basically to manage and do abatement work; correct?
A To manage the abatement work, yes, and do inspections.

Q Did you actually do hands-on the abatement work or did you just observe and manage it?
A Observed and managed it.
Q When you talked about doing bulk samples before, that's where you go and you take a little chunk out of the material, put it in a bag, and send it off to a laboratory; right?
A That's correct.
Q Did you do the bulk analysis?
A No.
Q Somebody else did that.
A That's correct.
Q You never saw anybody work with asbestos-containing insulation materials until the 1990's when you got involved in the abatement work; right?
A That's correct.
Q And you've actually never seen anybody install asbestos-containing insulation materials.
A That's correct.
Q You've only seen the abatement/removal process.
A That's correct.
Q Now, your reports are cosigned by somebody named Garza?
A Kenneth Garza.
Q He's an industrial hygienist; right?

A That's correct.
Q In your reports you testify or you state conclusions not in the singular I or me or my opinions, but as we or we find; correct?
A That's correct. That's how these -- those cases were set up to be done.
Q You also told us this morning that the large report, which is 57 pages, is a collection of material that was put together by you, by Mr. Garza, and Mr. Hays; right?
A We have all worked on it, yes.
Q Anybody else?
A No.
Q You can't tell the Court which of those words you wrote or which of those words somebody else wrote.
A Not specifically because they've been -- we've all been rewriting it as we go along.
Q The reason that you cosign those reports with Mr. Garza is because he's a certified industrial hygienist; right?
A No. That is how Bob McCoy wanted these cases to be set up. We were supposed to produce a general report, which both Ken and I would sign, and then each one of the lawsuits, because there's going to be quite a few of them, they would come to me or come to Ken, but we would

both sign it. That's how it was agreed to be done.
Q Why did you both have to sign them?
A That's how we agreed to do it when we decided to take on the cases.
Q Sir, which opinions are yours in that report and which opinions are Mr. Garza?
A Well, we all discuss what our opinions are. It's not like our opinions are that far off or we wouldn't be working together on it.
Q But the opinions --
A The basic concept is asbestos is a hazardous. You disturb asbestos, it's going to get airborne. It'll stay airborne for a long time. Any exposures above background is significant. The rest of the stuff, wind, the diseases were identified, where -- whether these people, the plaintiffs talk about warnings, respiratory detection or training, I mean those are all basic concepts of the asbestos industry.
Q That's a pretty short report. Maybe we should let you testify this morning rather than Mr. McCoy. We'd have been done a lot sooner.
THE COURT: We'll strike that as unnecessary. Let's keep moving.
Q You agree that when you look at insulation on a pipe, you can't tell who manufactured it?

A Generally, yeah. There may be instances where you might see a label on it, but generally I would agree with you.
Q Now, you've never been to Badger Ordnance Works?
A No, I have not.
Q You don't know where it is?
A No, not specifically.
Q You didn't do any monitoring, air monitoring there did you?
A No.
Q You didn't do any sort of the case-specific exposure dose calculation at all?
A No.
Q As of a few days ago, you associated the product Kaylo with a manufacture called Pittsburgh Corning; right?
A Yes, I did get that confused with the other Illinois. I always get those confused.
Q Lot of people do apparently.
A Yeah.
Q Did you do anything to verify the accuracy or the assumptions that were given you by the Cascino Vaughan law firm?
A Only by what's in the depositions.
Q Did you actually read those depositions all the way

through or just certain highlighted portions of them?
A Well, I read them to the extent since I highlighted them, so I read them generally through. Not every word.
Q Now, your opinions that you gave us today about exposures from thermal insulation materials, that applies to every brand of pipe covering; right?
A Asbestos fiber, yes.
Q So those opinions, those numbers you gave us, it applies to asbestos-containing pipe covering?
A Yes.
Q Regardless of who made it?
A That's correct.
Q It applies to asbestos-containing block regardless of who made it?
A Yeah, I'm not sure, I'd have to go back and look. I don't know if those things included block.
Q In your report though, in your report where you have studies about the exposure levels on thermal insulation products, it includes all of the different types of thermal insulation; right?
A That's correct.
Q That includes cements?
A Yes, it does.
Q Also known as muds?
A That's correct.

Q Asbestos cloth?
A That's correct.
Q Asbestos blankets?
A Not so much asbestos. I mean it may be taught, but I don't think there are any numbers associated with them.
Q How about asbestos-containing mastics?
A What type of mastic are you talking about? Are you talking about the cements before that?
Q The stuff they would paint on the pipes after they were done.
A I think there is some data on that.
Q And that applies -- those numbers apply regardless of what product or who manufactured it; right?
A Generally yes, unless for some reason it specifically mentions the product name.
Q You made no attempt to break out any of the exposures to any type of product in this case?
A To a specific product, no.
Q You did not try to calculate what a 40-year total dose exposure would have been for Mr. Suoja.
A No.
Q Now, if you assume that over a 40-year career as an asbestos worker that the work was constant and it was pretty much similar over 40 years, the exposure over

each of those 40 years would be about constant; is that right?
A Yes.
Q And if you have one year of exposure to a product out of that, it would be one-fortieth of the total exposure; right?
A That's correct.
Q And if you have one month of a product over that 40-year career, that would be 1-480th of the total exposure; right?
A Assuming your math is correct, yes.
Q Now, in your reports that you had where you were giving exposure levels of fiber per CCs, you had products like Unibestos listed in there. You remember that?
A Yes.
Q Now, Unibestos was a product that was 65 percent asbestos; correct?
A I believe that's what it said, yes.
Q And the exposure levels from that product were a lot higher than the products that were 20 percent asbestos; right?
A That's correct.
Q Did you take a look at any evidence or anything to see if Mr. Suoja was exposed to Unibestos products?

A No. And again, you need to look at those as the types of exposures that a person could have. You can look at the average, and when you do an average, you get a series of numbers. You do an average, what does that tell you? Well, it's telling you what the average of that series of numbers.

But you can also look at it point by point and get an idea what the type of exposures could be. They're just tools for understanding numbers.

Q Now, if the precautionary measures like exhaust ventilation were employed at job sites, that would reduce the exposure; right?

A Depending how it's done, yes.

Q Precautionary measures such as wet methods where you would wet down the material before you used it, that would reduce exposures; right?

A That's correct.

Q Other dust suppression techniques, if they were used, that would reduce the exposure; correct?

A That's correct.

Q If someone used a US Bureau of Mines approved respirator, that would eliminate the exposure to that person, wouldn't it?

A No.

Q Why not?

A Because it's not going to go to zero. They have protection factors. So there is going to be some level of exposure that's going to occur even with the respirators on.
Q So what level of exposure would occur in 1968 if someone was wearing a U.S. Bureau of Mines approved respirator while they are using asbestos-containing insulation materials?
A What type of respirator?
Q One that's designed by the U.S. Bureau of Mines for asbestos use. You know that those existed; right?
A Well, there's various types. You have half face, you've got full face, you've got PAPRs. There have different protection factors.
Q What's the best one?
A Well, light air is the best one. It's going to reduce it completely.
MR. CASMERE: Do you want to stop at noon, Your Honor, or do you want me to go for another --
THE COURT: If this is a good breaking point, let's do that.
MR. CASMERE: It's probably a good breaking point.
THE COURT: Okay. Then let's take the full hour. Tomorrow you guys -- or this afternoon you can

report if you need the full hour because we can always tighten it up. Mr. Kenoyer, you're free to go out to lunch with your lawyers. Just do not talk about your testimony in any fashion. Understood?

THE WITNESS: Okay. Yes, sir.

THE COURT: With that, we'll resume at one o'clock.

(Noon recess 12:01 p.m.)

* * * * *

I, LYNETTE SWENSON, Certified Realtime and Merit Reporter in and for the State of Wisconsin, certify that the foregoing is a true and accurate record of the proceedings held on the 30th day of November 2015 before the Honorable Stephen L. Crocker, Magistrate Judge for the Western District of Wisconsin, in my presence and reduced to writing in accordance with my stenographic notes made at said time and place.
Dated this 15th day of December 2015.

/s/_____

Lynette Swenson, RMR, CRR
Federal Court Reporter

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